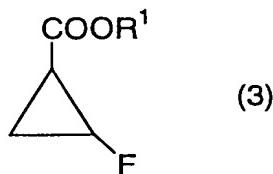


Abstract

Provided is an industrially applicable process for producing 1,2-cis-2-fluorocyclopropane-1-carboxylic ester.

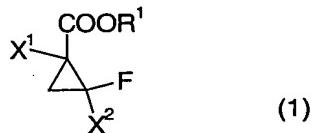
A process for producing a compound represented by formula (3) :

[F2]

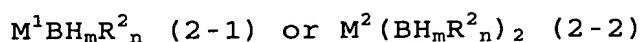


[wherein R<sup>1</sup> represents, for example, a C1-C8 alkyl group], which process includes reacting a compound represented by formula (1) :

[F1]



[wherein X<sup>1</sup> represents a hydrogen atom, a chlorine atom, a bromine atom, or an iodine atom; X<sup>2</sup> represents a hydrogen atom, a chlorine atom, a bromine atom, or an iodine atom; X<sup>1</sup> and X<sup>2</sup> are not simultaneously hydrogen atoms; and R<sup>1</sup> has the same meaning as defined in formula (3)] with a reducing agent represented by formula (2) :



[wherein M<sup>1</sup> represents an alkali metal atom; M<sup>2</sup> represents an alkaline earth metal atom or a zinc atom; R<sup>2</sup> represents, for

example, a hydrogen atom; m represents an integer from 1 to 4; n represents an integer from 0 to 3; and the sum of m and n is 4] in the presence of an aprotic polar solvent, and a Lewis acid such as a halide of an atom selected from among, for example, boron, magnesium, and aluminum.